G.R.S. IX-5]

Previous references. (1923.4 Part) **File No.** 16-23

Serial Nos. ~~18~~ 1–18

Later references.

57

GENERAL AND REVENUE SECRETARIAT

Serial Nos. 18

Part B for Aug 24

SUBJECT

Invention no 7/23-4 for "Improvements in and ~~relat~~ relating to the manufacture of caoutchouc, Gutta percha and analogous vegetable resins" by Mervin Stanley Stubbsbury of 7 Grace Chur St London and Earnest Alfred Hauser - German

(1

G. R. S. 11] 1923.

GENERAL AND REVENUE SECRETARIAT.

(Pol-)

NOTES.

File No. 16-23.

FILE HEADING.

Invention no 7/23-24 - for "Improvements in & relating to the manufacture of Caoutchouc, Gutta percha, Balata & analogous Vegetable Resins" by Mervyn Stanley Stutchbury, of 7, Grace church Street, London & Ernest Alfred Hauser, of 7-15 Marien-Straße, Frankfurt-a-M. Main, Germany.

From

Messrs De Penning & De Penning, Calcutta

No. Letter Dated 30-11-23. Received 6-12-23

Diary No. 2283	Enclos.	Spare Copies.	Serial No. 1

BRIEF ABSTRACT OF LETTER.

Requests that leave may be granted to file a Specification in respect of the above invention & advises remittance of Rs 11/- on account of Application & Stamp fees

NOTES AND ORDERS.

It is clear from the application that Ernest Alfred Hauser is the inventor. It is not known what interest Mervyn Stanley Stutchbury has in the invention. A draft enquiry is put up. The P. R. L. duly entered is put up into D no. 2336.

AKS 14-12-23.

Dft for approval — If Mr Stutchbury is not certain as to whether he does or does not claim as an executor or administrator he should be entitled to make an application as in S 4 cl 5.

Issued 15/12 Rev Reg. 15/12 14/12

NOTES—First Sheet.

G. R. S. III-2]

General and Revenue Secretariat. Pol - File No. 16 of 1923.

Serial No.	
2	To Messrs Depenning & Depenning Bombay 3878 dt 17/12/23 Acknowledge receipt of Rs 11/- and the Stamp Rs 11/- refund to Treasurer & enquires what interest has Stanley Hutchinson has while Earnest Alfred Stanley is the inventor.
	The Treasury receipt for Rs 10/- A draft requesting the firm to furnish the information called for & to remit an additional sum of 8 as on account of Stamp fees is put up AHS 19-3-24. 13 Issue SMM 17/3
4	To Messrs Depenning & Depenning Bombay 3878 dt 4/3/24. With reference to (2) requesting to furnish us with required information and to remit an additional sum of Rs 0-8-0 towards the Stamp value.
5	Messrs. Depenning & Depenning. Letter dt 29-3-24. Advises the remittance of eight annas towards the value

SecA 3.

GEN. & REV. SECTT.
19 DEC 1923
INDUSTRIES & COMMR.
BRANCH

NOTE—Contd. sheet.

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G. R. S. III-2j

General and Revenue Secretariat. Pat File No. 16 of 1923

Serial No.	
	Q: Stamp fees required.
6	From lessors: Desmond & Desmond Letter dt 4-4-24. Forwards a deed of assignment in favour of Mrs. Stutchbury & Lands a money order of Rs. 107 for Stamping the said document
	Lessors: Desmond & Desmond were asked to state what interest Mr. Mervyn Stanley Stutchbury has in the invention.
	In their present communication they state that the above gentleman is the present assignee & that Mr E. A. Hauser is the real inventor, & state the deed of assignment may be got stamped for an amount of Rs. 107/- has been sent
	Rtd with 3 drafts for approval
	11/4/24. What is the value of the Stamp required for the deed of assignment? The Examination is £ 50 Rs 666
	SNR 11/4
	Returned (Vide Schedule I A,

No. P.C. 3878 dt 17/12/23
Pat. 16-22-2
C

NOTE—Contn. sheet

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4324

G. R. S. III-2]

General and Revenue Secretariat. Pat File No. 16 of 1923

Serial No.

L

Clauses 18 (portion marked)

12/4/24

Issue

SM 15/4

7 To

Messrs Depenning & Depenning

No. C 65-26-23/4

Acknowledge the receipt of deeds

8 To

The Superintendent of Stamps

No. C 65-29-28/4

for the power of Attorney & the deed of Assignment for being impressed with the Stamps of the value of Rs 1½ & 10 respectively & returned.

9 To

The Director of Printing

No. C 65-20-28/4

forwarding Rs, 15 application for reprint.

Rs A

10 From the Superintendent of Stamps

No. 402 dt 25-4-24

Returns duly stamped the power of attorney & the deed of assignment.

Send with drafts

28/4/24

Issue

28/4/24

GEN. & REV. SECRETARIAT
2 ... 24
REGISTERED
LIBRARY

NOTE—Contn. sheet.

~~6690~~ 358 (5

G. R. S. III-21

General and Revenue Secretariat. pol - File No. 16 of 1929.

Serial No.	
11	To The Supdt of Stamps Bengal Orissa & Sylhet. Acknowledges rec'd of assignment & power of Attorney forwarded with slip
12	From the Dep. of Dft No. Pat. No. 6 dy 18/7/24 states that leave may be granted to file a specification of an invention for "Improvements in and relating to the manufacture of Caoutchouc, Gutta percha, Balata & similar gums vegetable kingdom." Subd with 2 drafts. 23/7/24 May be Sanctioned SMR 28/7 Rec'd 24/7 SMR 24/7 Rec'd 24/7 Issued SMR 25/7
13	Messrs Drewett & Drewett, Patent Agents, 10 Old Post Office Place, East, Calcutta Informed how to file a specification

NOTE—Contn. sheet.

G. R. S. III-21

General and Revenue Secretariat.

Part File No. 16 of 1923

Serial No.	
	to ~~inform~~ despatch of an invention and ~~to~~ the fact ~~may be informed~~ to the party concerned.
	GEN. SECR. 2/14 1-AUG 1924 INDUSTRIES & COMMERCE BRANCH. To
	Messrs Deprenning & Deprenning No 2.C 802 dt 31/7/24
	Forward Copy of dc (13) with a Request that the fact may be communicated to the party concerned.
15	From Messrs: De'Penning & De'Penning. Letter dt 16.8.24
	forward Copies of Specifications & advise the remittance of Rs. 30/- (filing fee).
	Filed. with 3 drgs, & the T. R Receipt & G.O. (dft) ~~forwarding~~ with the certificate of the Court duly filled up.
	22/8/24
	Issue SM 23/8
16	To
	The Compiler, Mysore Gazette No 2.C 1816 dt 25.8.
	Notifies the filing of the Specification
17	To.
	Messrs Deprenning & Deprenning No 2.C. 1817 dt 25.8
	Forg Copy of dc (16) & Returns the certificate

NOTE—Contn. sheet.

890 7

G. R. S. III-2]

WD 2310—GPE—10,000—31-5-24

General and Revenue Secretariat

Pal. File No. 16 of 1924.

Serial No.	
18	Duly filled in & signed. To The Supdt. Govt. Museum & Chief Engr. & Director of P.W.D. Nos. C 1318-20 & 2578 Forwards a copy each of the Specifica-tion for record in his office.

GEN. & REV. SECRETARIAT
27 AUG 1924
INDUSTRIES & COMMERCE
BRANCH.

Pol-16-23-1

2283 (8

ESTABLISHED 1856.

De Penning & De Penning

PATENT AGENTS

MEMBERS CHARTERED INSTITUTE PATENT AGENTS LONDON

F. M. AUSTRALASIAN INSTITUTE PATENT ATTORNEYS MELBOURNE.

TELEGRAPH & CABLE ADDRESS:-
"DEPEND CALCUTTA."
CODES USED:-
5TH ED. A.B.C., WESTERN UNION & SINGERS CODE.

10, Government Place, East,
Calcutta.

15530

30th November, 1923.

11 Pages

GEN. & REV. SECTT. Br ... To 6 DEC 1923

GEN. & REV. SECRETARIAT 6 DEC 1923 INDUSTRIES & COMMERCE BRANCH.

The Secretary to the Government
of His Highness the Maharaja of Mysore
General & Revenue Department,
Bangalore.

Sir,

We have the honour to forward herewith an Application from Mervyn Stanley Stutchbury of 7 Gracechurch Street, London E.C. 3, and Ernest Alfred Hauser of 7-15 Marienstrasse, Frankfurt-on-the Main, Germany, for leave to file a specification of their invention for "Improvements in and relating to the Manufacture of Cacutchouc, Guttapercha, Balata, and Analogous Vegetable Resins".

We forward by Money Order the sum of Rs. 11/-/- being Rs. 10/-/- the fee on the above Application and Re. 1/-/- for stamp on the Power of Attorney which please have stamped for us.

The usual Government order in the case may please be sent to us in due course.

We have the honour to be,
Sir,
Your most obedient servants,
De Penning & De Penning

Pat 16/23

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN.

BE IT KNOWN that we, Mervyn Stanley Stutchbury, of 7, Gracechurch Street, London, E.C.3., British Subject, and Ernest Alfred Knauer, of 7-15, Carlonstrasse, Frankfurt-on-the-Main, Germany, Austrian Citizen, are in possession of an invention for "Improvements in and relating to the Manufacture of Caoutchouc, Gutta-percha, Balata, and Analogous Vegetable Resins", and we, the said Mervyn Stanley Stutchbury, and Ernest Alfred Knauer, do hereby declare the nature of the said Invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement thereof, that is to say:-

This invention relates to improvements in and relating to the manufacture of caoutchouc, guttapercha, balata, and analogous vegetable resins.

Of late it has been found that in several industries it is of advantage not to work up crude caoutchouc, guttapercha, balata and other analogous vegetable resins, but to work up latex in the form of caoutchouc, guttapercha, balata and the like latices as they come from the plants. In most cases, however, this working up of the latices is not possible inasmuch as their transport from their place of origin to the place where they are to be worked up is impracticable. The reason for this is to be found firstly in the high water-content of the latices, amounting to 65-75%, and secondly in the high sensitivity towards decomposing influences of bacteria, temperature and of other disturbances, which up to the present still lead to great losses of latex. For this reason the shipment of latex has taken place in only relatively small quantities, and even then it is only transported in closed metal vessels with the addition of preservative agents.

Although by the use of reduced pressure at a temperature not exceeding 50° C., caoutchouc latex can be concentrated to a standard strength before being coagulated, and although by uniformly evaporating surplus water from latex (with or without the addition of preservatives to prevent decay), to a degree short of coagulation, a concentrated latex may be produced which remains soluble in water, it is not possible by these means to carry out such concentration or evaporation to such an extent as to produce a pasty or solid rubber latex, i.e., a latex from which most or all the water has been removed and which by the addition of water can be reconverted into its original state.

If the latex of the Hevea Brasiliensis and other caoutchouc furnishing plants, or the latices of guttapercha, balata, or other analogous vegetable resins be transformed, by evaporating their water, into a product which contains practically the total constituents of the original material, with the exception of the evaporated water, only a product is obtained which

consists of crude caoutchouc, guttapercha, balata, or other analogous vegetable resins. On the addition of water to this dried product it will be noticed that although small quantities of salts and the like may redissolve, the coagulatable constituents of the caoutchouc, guttapercha, balata or the like latices have not gone into solution.

Caoutchouc, guttapercha, balata, and the like latices are emulsions in which on removal of the water a so-called dry coagulation occurs. The colloids contained in caoutchouc guttapercha, balata and the like latices are therefore irreversible.

The object of the present invention is a process for producing a paste-like or solid water-soluble product of caoutchouc latex (including latex in the preserved state, or in a state in which the caoutchouc is vulcanised without losing its colloidal properties) or of latex of guttapercha, balata, and other analogous vegetable resins, which product can be reconverted into the original latex by the addition of water.

We have found that the object of our invention can be performed by two methods.

According to the first method protective colloids with or without substances are added to the latex which impede coagulation, pectisation or flocculation of the latex and aid in peptisation or dissolvation on withdrawal of the water from the latex by physical or mechanical means such as by evaporation, spray-drying or the like, and according to the second method the serum of the latex is withdrawn by filtration, ultra-filtration or dialysis, whilst preferably also protective colloids with or without the addition of substance which impede coagulation, pectisation or flocculation of the latex and aid in peptisation or dissolvation are added to the latex prior to the withdrawal of the water. Whereas when using the first method the constituents which do not consist of caoutchouc, guttapercha or balata, are also contained in thefinished product, when using the second method i.e., filtration, ultra-filtration, or dialysis, the constituents

which do not consist of caoutchouc, guttapercha, balata or the like are removed with the filtrate. In both cases the product obtained from the raw latices which is in a solid or paste-like condition, has maintained its colloidal properties, that is to say on adding water the product takes up its original degree of dispersion and forms a colloidal aqueous solution or emulsion of the caoutchouc, guttapercha, balata or the like constituents of the original latices, and to all intents and purposes is identical to the original latex.

When applying the invention to caoutchouc latex according to the first method, i.e., for the purpose of avoiding coagulation, pectisation or flocculation, and for producing caoutchouc latex in pasty or solid form in which the colloids contained in the original latex can be transformed again into their original state of dispersion by the addition of water, suitable kinds and quantities of protective colloids are added to the caoutchouc latex prior to or during the removal of the water. As suitable protective colloids may be mentioned by way of example, gelatine, glue, gum arabic, saponin, casein, white of eggs, alkali albuminates or their products of decomposition (sodium protalbinate and sodium lysalbinate) and the like, or combinations of said substances. It is also sometimes advantageous to add such substances which prevent or impede coagulation, pectisation or flocculation of the albumin constituents of the latex in addition to said protective colloids. As such substances may be mentioned alkali sulphites, iodides, rhodanides, or combinations thereof.

According to the kind of the protective colloid or of the substance which impedes coagulation, pectisation or flocculation, it is preferable to remove the water in the presence of an alkali such as for example ammonia, or of an organic base, for the purpose of neutralising the natural acidity of the caoutchouc latex, and for preventing the coagulation caused by such acid, i.e., substances acting as peptisation,

dissolvation or deflocculation agents.

Instead of applying the process of the present invention to fresh or preserved latex, the same can also be applied to such latex which, without losing its colloidal properties, has been vulcanised in its original aqueous solution. In this case an already vulcanised water soluble paste-like or solid final product is obtained from caoutchouc latex. Thus we have succeeded in obtaining a paste-like or solid vulcanised caoutchouc which is entirely soluble in water.

In case the first method is applied to guttapercha, balata and the like, inasmuch as these are colloidal liquids which in contradistinction to caoutchouc latex contain more or less tanning substances, the use of ammonia for the purpose of preserving the latices is not always possible. Preferably therefore for preserving guttapercha, balata and the like latices, instead of alkalis, organic bases are used, such as for example piperidine; in all other respects however the process described above in relation to caoutchouc latex is also applicable to latices of guttapercha, balata and other analogous vegetable resins.

The substances used as protective colloids, peptisation, dissolvation agents, or for impeding the coagulation, pectisation or flocculation of the albumin constituents may be used at the same time for imparting special properties to the final product when it is worked up into caoutchouc, guttapercha, balata or the like. Thus for example they may serve at the same time as means for increasing the elasticity, as fillers, colouring matters, or in the case of caoutchouc as vulcanisation accelerators or controllers, or they may serve certain other purposes, for influencing the manufacture or the properties of the final product.

The latex to which the aforementioned agents have been added is either dried to such an extent that the total amount of water is withdrawn and a solid water-soluble product is obtained, or the drying is effected only until a paste-like consistency is produced. It is also possible to add the desir-

ed quantity of water to the solid product, and thus obtain a paste of any desired consistency.

The removal of the water may be effected by physical or mechanical means with any evaporation or drying apparatus such as for example vacuum dryers, air dryers or spray-dryers, in which such temperatures can be employed as are below the natural temperature of coagulation or flocculation of the albumin of the latices.

The second method of carrying out the process consists in filtering the latex through filters of any suitable kind, as for example ceramic filters, ultra-filters, membranes, or similarly acting filtering devices, and thereby removing the liquid constituents with the filtrate, which then contains the non-caoutchouc or the like constituents of the latex, such as albumins, resins, sugars, mineral salts, whereas the residue consists of the concentrated product obtained from the latex. The filtration is preferably effected in the presence of protective colloids, with or without the addition of substances impeding coagulation, pectisation or flocculation of the latex and aid in peptisation or dissolvation.

Examples:

1). 1½% of sodium lysalbinate calculated on the amount of the dry constituents of the latex, a trace of sodium sulphite (less than 0.2%), and a few drops of a normal solution of caustic soda are added to caoutchouc latex containing 30% of dry substances. This mixture is evaporated in vacuo at a temperature not above 70° C., until a paste-like consistency has been attained. On the addition of water the product becomes soluble again, a trace of ammonia being preferably added to aid peptisation or dissolvation, when a colloidal suspension or solution of latex is obtained. The content of water in the paste is on an average of 15%.

2). 1½% of technical saponin is added to latex and dried with the so-called Krause spray-drying apparatus. The product obtained is absolutely dry and on being treated with

water with the addition of a trace of ammonia forms again a colloidal solution or suspension of any desired concentration.

3). 1% of technical saponin, calculated on the amount of vulcanised latex (caoutchouc content 30%) is added to a colloidal solution or emulsion of vulcanised caoutchouc latex in water, and dried in a so-called Krause spray-drying apparatus at a temperature of about 100° C. The resulting product is absolutely dry and can be easily dissolved in water, to which preferably a trace of ammonia has been added. By the addition of water to the dried product, an aqueous paste of vulcanised rubber of any desired concentration or by further dilution an aqueous solution may thus be obtained.

4). A Pukall filter cell (a porous filter made of very hard burnt clay with thin walls, which are however so hard that steel cannot scratch them) is inserted into latex of Hevea Brasiliensis. The cell is closed by means of a rubber stopper, which is connected to a vacuum pump. Filtration of the serum of the latex takes place into the inside of the cell, and this filtrate is removed, whereas the caoutchouc constituents of the latex are agglomerated on the outside of the cell. As soon as the pasty condition of the mass on the cell has been attained, which occurs with a content of water of about 30-40%, the product is ready for shipment. By the addition of water the product can be easily re-transformed into a latex-like liquid at the place where it is to be worked up.

5). 3% of sodium lysalbinate (a product of decomposition of albumin) are added to latex of the Hevea Brasiliensis and this mixture is filtered through a de Häen 10 second membrane filter, (a filter constructed by Zsigmondy and Bachmann, in which the pores are of graduated sizes, Z. anorg. Chem. 103, 119, 1918), and further treated as above described.

In both examples 4 and 5 a white pasty mass remains on the filter after 30-40% of the liquid calculated on the whole mass of latex is run through. This mass shows a high stability against all influences mentioned above, is instantaneously dispersed in water and yields an ordinary colloidal solution of suspension of latex in water.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:

1). The process for producing a paste-like or solid water-soluble product of caoutchouc latex (including latex in the preserved state or in a state in which the caoutchouc is vulcanised without losing its colloidal properties) or of latex of guttapercha, balata, and other analogous vegetable resins, which consists in adding suitable kinds and amounts of protective colloids to the latices of caoutchouc, guttapercha, balata or of other analogous vegetable resins, and thereupon removing the water from said latex by any suitable means and continuing said removal past the stage at which coagulation would occur if said protective colloids were not added, until most or all the water is removed, and a paste-like or solid product results, which can be reconverted into the original latex by the addition of water.

2). Modification of the process as set forth in Claim 1, in which in addition to the protective colloids such substances are added to the latex prior to evaporation which impede coagulation, -pectisation or flocculation of the latex, and aid in peptisation or dissolvation.

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3). Modification of the process as set forth in Claims 1 and 2, in which in the case of caoutchouc latex, prior to evaporation, an alkali, for example ammonia, or

an organic base, e.g. piperidine, are added to the latex for the purpose of neutralising the natural acidity of the caoutchouc latex, and for preventing acid coagulation.

4). Modification of the process as set forth in claims 1 and 2, in which in the case of latex of guttapercha, balata, or other analogous vegetable resins, prior to evaporation, instead of ammonia for preserving the latices, an organic base is used for the purpose of neutralising the natural acidity of the latex, and preventing an acid coagulation, and for preventing the detrimental effect which ammonia or the like alkalis would have on the tannic acid contents of the latex

5). Modification of the process as set forth in claims 1 to 4, in which the protective colloids or the substances impeding the coagulation, pectisation or flocculation are of such a nature that they serve at the same time as means for increasing the elasticity, as filling materials, colouring or in the case of caoutchouc latex as vulcanisation acceleration or controlling agents, or that they have any other properties for influencing the manufacture or the properties of the final product when worked up.

6). Modification of the process for concentrating latex of caoutchouc, guttapercha, balata, and other analogous vegetable resins, as set forth in the preceding claims, in which with or without the addition of protective colloids, peptising agents and agents impeding coagulation, pectisation or flocculation, the serum of the natural latices is removed by filtration, ultra-filtration or dialysis until the residue takes up the consistency of paste.

7). In the process as set forth in the preceding claims the addition of controlled amounts of water to the dried or paste-like reversible latices of caoutchouc,

(including caoutchouc latex in the vulcanised state), guttapercha, balata, and other analogous vegetable resins, for the purpose of obtaining a paste or solution of caoutchouc latex, vulcanised caoutchouc latex, guttapercha, balata, or the like, of any desired consistency.

8). The process for producing a paste-like or solid water-soluble product of caoutchouc latex (including latex in the preserved state, or in a state in which the caoutchouc is vulcanised without losing its colloidal properties) or of latex of guttapercha, balata, or other analogous vegetable resins, substantially as described.

9). A paste-like or solid water-soluble product obtained from caoutchouc latex (including latex in the preserved state or in a state in which the caoutchouc is vulcanised without losing its colloidal properties), or of latex of guttapercha, balata, or other analogous vegetable resins, whenever obtained according to the process set forth in the preceding claims.

10). A paste or solution of caoutchouc latex, vulcanised caoutchouc latex, or of latex of guttapercha, balata, or other analogous vegetable resins, of any desired consistency, produced by the addition of controlled amounts of water to the paste-like or solid water-soluble products obtained by the process set forth in claims 1 to 8.

Dated this 15th day of August 1915
Mervyn Stanley Stutchbury
and
Ernest Alfred Hamer
by their Agents & Attorneys
De Penning & De Penning

19

The remitter may write here any communication to the payee.

No. 11 Rs. —

Rupees ten for fee on application of Stokebury & Haiser

Rupee one for Stamp on Power of Attorney De Penning & De Penning

Remitter.

EN. & REV. SECRETARIAT
6 - DEC 1923
INDUSTRIES & COMMERCE
BRANCH.

D. G. I. & C. Branch

6/12/23

20

G. R. S. VI—G/32]

SUBJECT .....

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Diary No. of letter replied to .....

General and Revenue Secretariat

( )

the *192*

Date of issue 17.12.23

Signed by Asst. S. N. R.

Section Pat-

File No. 16-23.

Serial No. 2

No. J.C. 3878

To

Messrs Defenning & De Penning
Patent Agents
10, Govt Place, East
Calcutta.

Gentlemen,

I am directed to acknowledge the receipt of your letter A 30-11-23 forwarding an application for leave to file a Specification in respect of an invention no 7/1923-24 for "Improvements in and relating to the manufacture of Caoutchouc, Gutta percha, Balata and analogous Vegetable Resins" by Messrs Merrwyn Stanley Stutchbury of London and Ernest Alfred Hauser of Mariensstrasse, Frankfurt-on-the-Main and also the sum of Rs 11/- remitted on account of application & Stamp fees and to state that the application for the patent is made in the name of the two gentlemen referred to above, while only the

over.

P.T.O.

W D 0632 - GPB—1500—16-8-23

21

latter gentleman is stated to be the inventor. I am to enquire therefore what interest Messrs Stanley Shuttleworth has in the invention. In this connection I am to invite your attention to clause (5) of Section 4 of the Mysore Inventions & Designs Regulation XX of 1894.

D

Yours faithfully

SWD 14/11

R 15/11

To Secretary to Govt

E

List of enclosures.

Copied by

Examined by

22

Part 16-23-3 Doc. 2283

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.)

1. No. 643
2. Date of Remittance 3/1/24
3. From whom received Messrs. McRenning & Co., Calcutta
4. Date of receipt of amount in the General and Revenue Secretariat 6-12-23
5. On what account Attested fee in respect of marriage 7/23-24
6. Amount (in figures and words) 25-10-0 Rupees two only
7. The head to which it should be credited.

(To be filled in by the Treasury.)

S Narayana Rao

for *Secretary to Government,*
Rev
General Department.

The above amount has been duly received and credited in the Treasury on this date.

HUZUR TREASURY
Date
JAN 3 1924
BANGALORE.

Hd. Asstt. *Treasurer.* *Try. Officer.*

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

23

G. R. S. VI—G/32]

SUBJECT .....

.....

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Diary No. of letter replied to .....

General and Revenue Secretariat

( )

the 192

Date of issue 19-2-1926

Signed by M. S. Narayan Rao

Section Pat-

File No. 16-23.

Serial No. 24

No. JC 5334

To Messrs Depenning & Depenning
Patent Agents
10, Govt place, East
Calcutta.

Gentlemen,

I am directed to invite yr attention to this office letter no JC 3878 / Pat 16-23-24 dt 17-12-23 enquiring what interest Mr Mervyn Stanley Stutchbury has in invention no 7/1923-24 for "Improvements in and relating to the manufacture of caoutchouc, Gutta percha, Balata and analogous vegetable resins" by Messrs Mervyn Stanley Stutchbury of London and Earnest Alfred Hauser of Mariensthalle, Frankfurt-on-the-Main and to request that information therein required may kindly be furnished early. I am also to request that an additional sum of Rs as 8-0-0 be remitted.

P. T. O.

24

maybe remitted towards the value of stamps required for the power of attorney according to the revised rules in force in the State (vide Art 38(b) of Schedule I-A of Mysore Stamp Regulation as amended by Regulation VII of 1922).

Yours faithfully,

SMD 19/3

For Foreign Govt Dept

VS

List of enc'osures.

Copied by

Examined by

ESTABLISHED 1856.

De Penning & De Penning.

PATENT AGENTS

MEMBERS CHARTERED INSTITUTE PATENT AGENTS

LONDON

F. M. AUSTRALASIAN INSTITUTE PATENT ATTORNEYS

MELBOURNE.

TELEGRAPH & CABLE ADDRESS:
"DEPEND CALCUTTA."
CODES USED:-
5TH ED. A.B.C. WESTERN UNION & SINGERS CODE.

3125 No 4286 (25

H. Government of Bihar, East, Calcutta

GENERAL BRANCH 3 - APR 1924 INDUSTRIES & COMMERCE BRANCH

Pat. 16-23-5

29th March, 1924.

To

The Secretary to the Government
of His Highness the Maharaja of Mysore,
General & Revenue Secretariat,
B A N G A L O R E.

Sir,

re: Application Mysore Exclusive Privilege
Mervyn Stanley Statchbury & Earnest Alfred Hauser.

5554

With reference to your letter No:J.C. Pat.16-23-4 dated the 19th March 1924, we have today forwarded to you the required annas eight by Money Order towards the value of stamps for the Power of Attorney.

We have written to our correspondents in London for the Assignment in favour of Mr. Mervyn Stanley Statchbury in this case and will forward same on to you as soon as we receive it.

We have the honour to be,

Sir,

Your most obedient servants,

De Penning & De Penning

COUPON. The remitter may write here any communication to the payee.

No. X ds. 18/- for costs of stamps & Power of Attorney re: Mynors Exclusive Privilege. Mervyn Stanley Studebaker & Earnest Alfred Hawes 555a dated 19/3/24 see your letter No. 9.C Pat 16-23-4 [illegible] Remitter.

GEN. & REV
7-APR 1924
INDUSTRIES & COMMERCE
BRANCH.

W J & G Bousfield

In
4/4/24

3171 1256 DIARY NO 4376 (27)

ESTABLISHED 1856.

De Penning & De Penning,

PATENT AGENTS

MEMBERS CHARTERED INSTITUTE PATENT AGENTS
LONDON
F. M. AUSTRALASIAN INSTITUTE PATENT ATTORNEYS
MELBOURNE.

TELEGRAPH & CABLE ADDRESS:-
"DEPEND CALCUTTA."
CODES USED:-
5TH ED. A.B.C., WESTERN UNION & SINGERS CODE.

10, Government Place, East,
Calcutta.

GEN. & REV. SECRETARIAT
9 - APR 1924
INDUSTRIES & COMMERCE
BRANCH.

14th April, 1924.

Serial No.

P.L-16-23-6

To

The Secretary of the Government of His Highness
The Maharaja of Mysore,
General & Revenue Secretariat,
B a n g a l o r e.

Sir,

re: Application Stutchbury & Hauser No:7/1923-24.

With reference to your letters Nos: J.C. 3878 Pat-16-23 and J.C. 5554 Pat-16-23-4 dated the 17th December 1923 and 19th March 1924 respectively enquiring what interest Mr. Mervyn Stanley Stutchbury has in invention No:7/1923-24 for "Improvements in and relating to the manufacture of Caoutchouc, guttapercha, Balata and Analogous vegetable resins".

We have the honour to forward herewith a Deed of Assignment from the true inventor Dr. E.A.Hauser in favour of Mr. Stutchbury and we forward by Money Order Rs 10/- for stamping said Document and which please have done for us.

We have the honour to be,

Sir,

Your most obedient servants,

De Penning & De Penning

Bar 16-23

28

COUPON. The remitter may write here any communication to the payee.

I.s. 10/- As. x For payment of stamp fees on Assignment viz: Patent application Stutchbury & Heaven No 7/1903-4. vide our letter dated 4/4/24.

Remington & Remington.
Remitter.

Dr Remington

Rec
9/4/24

G.R.S. VI.—G/39.

29 3

SUBJECT 19/4

Diary No. of letter replied to

Section... P & V

File No. 16-23

Serial No. 7

GENERAL AND REVENUE SECRETARIAT

( )

the 191

No. IC 6538

Gentlemen

Inwards: de Penning

de Penning.

Calcutta

Date of issue 23/4/24

Signed by Mr S. Narayan Rao

no letter dt 4/4/24.

I am directed to acknowledge the receipt of your communication noted in the margin re invention 7/23 and to state that the matter referred to therein will receive early attention.

I have etc.,

for Secretary to Government.

Rev Depts

No. ... date ...

Subject ...

30

G. R. S. VI—s.v/14]

DRAFT.

3 & 5

SUBJECT..... 1/4 .....

.....

.....

Section. Par
File No. 16-23
Serial No. 8

Diary No. of letter replied to.....

No I.C 6539/Secy
Secy

GENERAL AND REVENUE SECRETARIAT
( )
he *191*

To

The Superintendent
of Stamps
in Mysore

Date of issue 28/4/24

Signed by M. S. [illegible]

Has the honor to forward herewith a
& a deed of assignment
Power of Attorney executed by ..... E. A.
Hancock Secretary
constituting Messrs. Stutchbury & Messrs. Depenning Depenning
as Assignee & as Agents respectively in respect of his ~~their~~ invention No. 7-23
for "Improvements in & relating to
the manufacture of Caoutchouc
Euttaperchas Balata & Analogous
vegetable resins and to request that the same may be im-
pressed with the Mysore General Stamp
of the value of Rupees ten & one rupee & annas eight
~~Rupee One~~, also herewith documents
forwarded, and the ~~Power~~ returned to
this office.

By Order,

15/4

Rev

For ~~Chief~~ Secretary to Government.

31
3 (1) 5

3. R. S. VI.—8-v/16]

DRAFT.

SUBJECT.....

.....

.....

Section. Part
File No. 16-23
Serial No. 9

Diary No. of letter replied to.....

No. 16654 a/Rules
Cc.

To

The Dir. of
Industries &
Commerce

GENERAL AND REVENUE SECRETARIAT,
( )
the.....*191*

Has the honor to forward herewith

Date of issue 23/6/22.

for report under Sec. 6, Cl. (2) of the

Signed by M. C. Narayana Rao

Mysore Inventions and Designs Regulation, XI of 1894, an application from M/s Stuchbury & ~~Son~~ E. A. Hause for leave dt. 7-23 to file a specification of an invention for "Improvements in & relating to the manufacture of Cassava Cheese, Gutta Percha, Balata & analogous vegetable products."

By Order,

SMR
15/4

for Secretary to Government.
Dir. of Ind & Com

GEN. & REV. SECTION 33453 ARCH

26 APR 1924

INDUSTRIES & COMMERCE 191-E

From The Superintendent of Stamps. in Mysore. Bangalore.

To The Secretary to the Govt of H.H. the Maharaja of Mysore Rev: Department Bangalore

Dated 25 April 1924

Despatched

Received 25 APR 1924

General No. 4572

No. 2

Enclosure No. 2 (Certified documents (1 Deed of Assignment, 1 P/A.)

Sir,

I have the honor to return herewith duly stamped a deed of Assignment & a Power of Attorney — forwarded

32

forwarded with my memo: No. C. 6539/Pol 42-23-8
dated 23rd instant. An acknowledgment
is requested

I have the honour to be,
Sir
Your most obedient Servant

Superintendent of Camps
& Excise in Mysore.

Rs. 1/8 34

GOVERNMENT OF MYSORE
1923 AP
24
CI-89
RUPEE 1

GENL. & REV. SECTT.
Br.
6 DEC 1923

POWER OF ATTORNEY.

IN THE MATTER of the Invention and Designs Regulation 1894, of the Government of Mysore and in the matter of Mervyn Stanley Stutchbury, of 7, Gracechurch Street, London E.C.3, British Subject, and Ernest Alfred Hauser, of 7-15, Marienstrasse, Frankfurt-on-the-Main, Germany; Austrian Citizen.

We the abovenamed Mervyn Stanley Stutchbury and Ernest Alfred Hauser, do hereby retain, constitute and appoint Mr L.A. DePenning & Mr H.A. DePenning, constituting the firm of DePenning & DePenning, 10, Government Place East, Calcutta as our Agents and Attorneys to apply for and obtain from the Government of Mysore and keep in force an Exclusive Privilege or Letters Patent for "Improvements in and relating to the Manufacture of Caoutchouc, Guttapercha, Balata, and Analogous Vegetable Resins", and we authorise them or either of them to sign our names to such papers and writings and do such acts regarding the same, including the appointment of a substitute or substitutes, as may be necessary or expedient.

Dated this 2nd day of November 1923.

Signed, Sealed and Delivered at London, England, this 2nd day of November 1923, in the presence of

M Stutchbury

Ernest Alfred Hauser

Albert Mond

William Thiemann

Rs-10/- 35

THIS INDENTURE made the second day of November one thousand nine hundred and twenty three between ERNEST ALFRED HAUSLER, of 7-15 Marienstrasse, Frankfurt-on-the-Main, Germany (hereinafter called the Assignor) of the one part and EVYN STANLEY STUTCHBURY, of 7 Gracechurch Street, London, E.C.3., England (hereinafter called the Assignee) of the other part. WHEREAS the Assignor claims to be the true and first Inventor of an invention entitled "Improvements in and relating to the manufacture of caoutchouc, guttapercha, balata and analogous vegetable resins" for which application for the grant of an Exclusive Privilege or Letters Patent is to be made in Mysore in the joint names of the Assignor and the Assignee AND WHEREAS in consideration of the sum of £50: 0: 0 (Fifty pounds sterling) the said Assignor has agreed with the Assignee for the sale to him of the entire right, title and interest in and to the said invention and the Exclusive Privilege or Letters Patent therefor in Mysore,

NOW THIS INDENTURE WITNESSETH that in pursuance of the said Agreement and in consideration of the sum of £50: 0: 0 (Fifty pounds) paid to the Assignor by the Assignee, the receipt whereof is hereby acknowledged, he the Assignor doth hereby assign and convey unto the said Assignee his entire right, title and interest in and to the said invention and the Exclusive Privilege or Letters Patent of Mysore and the sole and exclusive benefits to be derived therefrom TO HOLD use exercise and enjoy the same for the whole of the unexpired term or the said Exclusive Privilege or Letters Patent or any extension thereof.

IN WITNESS WHEREOF the said parties have hereunto set their hands and seals the day and year first above written.

SIGNED, SEALED AND DELIVERED
by the said Ernest Alfred
Hauser in the presence of:-

Ernest Alfred Hauser

Albert Wood
Chemical Engineer
William Thiemann.
Technical Assistant
both of 19 Southampton Buildings, Chancery Lane, London W.C.2 England.

SIGNED, SEALED AND DELIVERED
by the said Mervyn Stanley
Stutchbury in the presence of:

Mervyn Stanley Stutchbury

Wm. O. Stutchbury
Barrister-at-Law
Occupation of Barrister
L.L. Wolfe.
Printer
both of 7 Breams St. London E.C.

37

From

Ker

THE ~~CHIEF~~ SECRETARY TO THE
GOVERNMENT OF HIS HIGHNESS
THE MAHARAJA OF MYSORE

To

The Registrar
Mysore

Dated 29/4/24

No. J.C 675-7 / Pol 16-29-11

Has the honor to acknowledge the receipt of the Power of Attorney ~~duly~~ executed & the deed of assignment duly impressed with the Mysore Stamp and returned with your letter No. 402 dated 25-4-24

By Order,

28/4/24

Ker

For ~~Chief~~ Secretary to Government.

Dated 28/4/24

Signed by Ker

WD 874—GPE—200—15-1-21

38

GLE GRAPHIC ADDRESS "INDUS COM

In reply please refer to
No. Pat. No. 6.

Enc. 1 file of 11 sheets

GOVERNMENT OF MYSORE.
DEPARTMENT OF INDUSTRIES AND COMMERCE.
OFFICE OF THE DIRECTOR,
Dated, Bangalore the 18th July *192* 4.
19th

Circulation 2 c

FROM

P. G. D'SOUZA, ESQ., B.A., B.L. 7/23
Director of Industries and Commerce in Mysore
Bangalore (India)

Pat. 16-23-12

04762

GEN. 0358 RET.
21 JUL 1924
INDUSTRIES & COMMERCE BRANCH

To

The Secretary to Government,
Revenue Department,
Bangalore.

19. JUL

SIR,

Reference:- Your letter No. Ic 6540/ Pat. 16-23-5 dated 23rd April 1924.

With reference to above, I have the honour to state that leave may be granted to file a specification of an Invention for " Imrpovements in and relating to the manufacture of caoutchouc, guttapercha, Balata and Analogous vegetable resins"

The application is herewith returned for reference.

I have the honour to be,
Sir,
Your most obedient servant,

Ramachandra Rao

for DIRECTOR
(Absent from Station)

Part 16-23 39

7/23-24

APPLICATION.

To The Dewan of Mysore.

The Application of Mervyn Stanley Stutchbury, of 7. Gracechurch Street. London, E.C.3. British Subject, and Ernest Alfred Hauser, of 7-15 Marienstrasse. Frankfurt-on-the-Main, Germany; Austrian Citizen for leave to file a Specification under Part 1 of the Mysore Inventions and Designs Regulation, 1894.

1. The Applicants are in possession of an Invention for "Improvements in and relating to the Manufacture of Caoutchcu Guttapercha, Balata, and Analcgous Vegetable Resins"; Ernest Alfred Hauser is the Inventor thereof; and, to the best of their information and belief, the Invention is new within the meaning of part 1 of the Inventions and Designs Regulation, 1894, and no circumstance exists which, if the Applicants are authcrised to file a Specificatcn and file it in accordance with that Part, will disentitle them to an Exclusive Privilege thereunder in respect of the Invention.

The Applicants have not yet applied for a Patent in the United Kingdom in respect of this Invention.

The Applicants have filed an applicatcn for a Patent in British India in respect of this Invention on the 4th day of September 1923. This application which has been numbered 9641/1923 is at present under examination

2). The following is a descriptcn of the Invention:

This invention relates to improvements in and relating to the manufacture of caoutchouc, guttapercha, balata, and analogous vegetable resins.

Of late it has been found that in several industries it is of advantage not to work up crude caoutchouc, guttapercha, balata and other analogous vegetable resins, but to work up latex in the form of caoutchouc, guttapercha, balata and the like latices as they come from the plants. In most cases, however, this working up of the latices is not possible inasmuch as their transport from their place of origin to the place where they are to be worked up is impracticable. The reason for this is to be found firstly in the high water-content of the latices, amounting to 65-75%, and secondly in the high sensitivity towards decomposing influences of bacteria, temperature and of other disturbances, which up to the present still lead to great losses of latex. For this reason the shipment of latex has taken place in only relatively small quantities, and even then it is only transported in closed metal vessels with the addition of preservative agents.

Although by the use of reduced pressure at a temperature not exceeding 50° C., caoutchouc latex can be concentrated to a standard strength before being coagulated, and although by uniformly evaporating surplus water from latex (with or without the addition of preservatives to prevent decay), to a degree short of coagulation, a concentrated latex may be produced which remains soluble in water, it is not possible by these means to carry out such concentration or evaporation to such an extent as to produce a pasty or solid rubber latex, i.e., a latex from which most or all the water has been removed and which by the addition of water can be reconverted into its original state.

If the latex of the Hevea Brasiliensis and other caoutchouc furnishing plants, or the latices of guttapercha, balata, or other analogous vegetable resins be transformed, by evaporating their water, into a product which contains practically the total constituents of the original material, with the exception of the evaporated water, only a product is obtained which

consists of crude cacutchouc, guttapercha, balata, or other analogous vegetable resins. On the addition of water to this dried product it will be noticed that although small quantities of salts and the like may redissolve, the coagulatable constituents of the cacutchouc, guttapercha, balata or the like latices have not gone into solution.

Cacutchouc, guttapercha, balata, and the like latices are emulsions in which on removal of the water a so-called dry coagulation occurs. The colloids contained in cacutchouc guttapercha, balata and the like latices are therefore irreversible.

The object of the present invention is a process for producing a paste-like or solid water-soluble product of cacutchouc latex (including latex in the preserved state, or in a state in which the cacutchouc is vulcanised without losing its colloidal properties) or of latex of guttapercha, balata, and other analogous vegetable resins, which product can be reconverted into the original latex by the addition of water.

We have found that the object of our invention can be performed by two methods.

According to the first method protective colloids with or without substances are added to the latex which impede coagulation, pectisation or flocculation of the latex and aid in peptisation or dissolvation on withdrawal of the water from the latex by physical or mechanical means such as by evaporation, spray-drying or the like, and according to the second method the serum of the latex is withdrawn by filtration, ultra-filtration or dialysis, whilst preferably also protective colloids with or without the addition of substances which impede coagulation, pectisation or flocculation of the latex and aid in peptisation or dissolvation are added to the latex prior to the withdrawal of the water. Whereas when using the first method the constituents which do not consist of cacutchouc, guttapercha or balata, are also contained in thefinished product, when using the second method i.e., filtration, ultra-filtration, or dialysis, the constituents

which do not consist of caoutchouc, guttapercha, balata or the like are removed with the filtrate. In both cases the product obtained from the raw latices which is in a solid or paste-like condition, has maintained its colloidal properties, that is to say on adding water the product takes up its original degree of dispersion and forms a colloidal aqueous solution or emulsion of the caoutchouc, guttapercha, balata or the like constituents of the original latices, and to all intents and purposes is identical to the original latex.

When applying the invention to caoutchouc latex according to the first method, i.e., for the purpose of avoiding coagulation, pectisation or flocculation, and for producing caoutchouc latex in pasty or solid form in which the colloids contained in the original latex can be transformed again into their original state of dispersion by the addition of water, suitable kinds and quantities of protective colloids are added to the caoutchouc latex prior to or during the removal of the water. As suitable protective colloids may be mentioned by way of example, gelatine, glue, gum arabic, saponin, casein, white of eggs, alkali albuminates or their products of decomposition (sodium protalbinate and sodium lysalbinate) and the like, or combinations of said substances. It is also sometimes advantageous to add such substances which prevent or impede coagulation, pectisation or flocculation of the albumin constituents of the latex in addition to said protective colloids. As such substances may be mentioned alkali sulphites, iodides, rhodanides, or combinations thereof.

According to the kind of the protective colloid or of the substance which impedes coagulation, pectisation or flocculation, it is preferable to remove the water in the presence of an alkali such as for example ammonia, or of an organic base, for the purpose of neutralising the natural acidity of the caoutchouc latex, and for preventing the coagulation caused by such acid, i.e., substances acting as peptisation,

dissolvation or deflocculation agents.

Instead of applying the process of the present invention to fresh or preserved latex, the same can also be applied to such latex which, without losing its colloidal properties, has been vulcanised in its original aqueous solution. In this case an already vulcanised water soluble paste-like or solid final product is obtained from caoutchouc latex. Thus we have succeeded in obtaining a paste-like or solid vulcanised caoutchouc which is entirely soluble in water.

In case the first method is applied to guttapercha, balata and the like, inasmuch as these are colloidal liquids which in contradistinction to caoutchouc latex contain more or less tanning substances, the use of ammonia for the purpose of preserving the latices is not always possible. Preferably therefore for preserving guttapercha, balata and the like latices, instead of alkalis, organic bases are used, such as for example piperidine; in all other respects however the process described above in relation to caoutchouc latex is also applicable to latices of guttapercha, balata and other analogous vegetable resins.

The substances used as protective colloids, peptisation, dissolvation agents, or for impeding the coagulation, pectisation or flocculation of the albumin constituents may be used at the same time for imparting special properties to the final product when it is worked up into caoutchouc, guttapercha, balata or the like. Thus for example they may serve at the same time as means for increasing the elasticity, as fillers, colouring matters, or in the case of caoutchouc as vulcanisation accelerators or controllers, or they may serve certain other purposes, for influencing the manufacture or the properties of the final product.

The latex to which the aforementioned agents have been added is either dried to such an extent that the total amount of water is withdrawn and a solid water-soluble product is obtained, or the drying is effected only until a paste-like consistency is produced. It is also possible to add the desir-

ed quantity of water to the solid product, and thus obtain a paste of any desired consistency.

The removal of the water may be effected by physical or mechanical means with any evaporation or drying apparatus such as for example vacuum dryers, air dryers or spray-dryers, in which such temperatures can be employed as are below the natural temperature of coagulation or flocculation of the albumin of the latices.

The second method of carrying out the process consists in filtering the latex through filters of any suitable kind, as for example ceramic filters, ultra-filters, membranes, or similarly acting filtering devices, and thereby removing the liquid constituents with the filtrate, which then contains the non-caoutchouc or the like constituents of the latex, such as albumins, resins, sugars, mineral salts, whereas the residue consists of the concentrated product obtained from the latex. The filtration is preferably effected in the presence of protective colloids, with or without the addition of substances impeding coagulation, pectisation or flocculation of the latex and aid in peptisation or dissolvation.

Examples:

1). 1½% of sodium lysalbinate calculated on the amount of the dry constituents of the latex, a trace of sodium sulphite (less than 0.2%), and a few drops of a normal solution of caustic soda are added to caoutchouc latex containing 30% of dry substances. This mixture is evaporated in vacuo at a temperature not above 70° C., until a paste-like consistency has been attained. On the addition of water the product becomes soluble again, a trace of ammonia being preferably added to aid peptisation or dissolvation, when a colloidal suspension or solution of latex is obtained. The content of water in the paste is on an average of 15%.

2). 1½% of technical saponin is added to latex and dried with the so-called Krause spray-drying apparatus. The product obtained is absolutely dry and on being treated with

water with the addition of a trace of ammonia forms again a colloidal solution or suspension of any desired concentration.

3). 1% of technical saponin, calculated on the amount of vulcanised latex (caoutchouc content 30%) is added to a colloidal solution or emulsion of vulcanised caoutchouc latex in water, and dried in a so-called Krause spray-drying apparatus at a temperature of about 100° C. The resulting product is absolutely dry and can be easily dissolved in water, to which preferably a trace of ammonia has been added. By the addition of water to the dried product, an aqueous paste of vulcanised rubber of any desired concentration or by further dilution an aqueous solution may thus be obtained.

4). A Pukall filter cell (a porous filter made of very hard burnt clay with thin walls, which are however so hard that steel cannot scratch them) is inserted into latex of Hevea Brasiliensis. The cell is closed by means of a rubber stopper, which is connected to a vacuum pump. Filtration of the serum of the latex takes place into the inside of the cell, and this filtrate is removed, whereas the caoutchouc constituents of the latex are agglomerated on the outside of the cell. As soon as the pasty condition of the mass on the cell has been attained, which occurs with a content of water of about 30-40%, the product is ready for shipment. By the addition of water the product can be easily re-transformed into a latex-like liquid at the place where it is to be worked up.

5). 3% of sodium lysalbinate (a product of decomposition of albumin) are added to latex of the Hevea Brasiliensis and this mixture is filtered through a de Häen 10 second membrane filter, (a filter constructed by Zsigmondy and Bachmann, in which the pores are of graduated sizes, Z. anorg. Chem. 103, 119, 1918), and further treated as above described.

In both examples 4 and 5 a white pasty mass remains on the filter after 30-40% of the liquid calculated on the whole mass of latex is run through. This mass shows a high stability against all influences mentioned above, is instantaneously dispersed in water and yields an ordinary colloidal solution of suspension of latex in water.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:

1). The process for producing a paste-like or solid water-soluble product of caoutchouc latex (including latex in the preserved state or in a state in which the caoutchouc is vulcanised without losing its colloidal properties) or of latex of guttapercha, balata, and other analogous vegetable resins, which consists in adding suitable kinds and amounts of protective colloids to the latices of caoutchouc, guttapercha, balata or of other analogous vegetable resins, and thereupon removing the water from said latex by any suitable means and continuing said removal past the stage at which coagulation would occur if said protective colloids were not added, until most or all the water is removed, and a paste-like or solid product results, which can be reconverted into the original latex by the addition of water.

2). Modification of the process as set forth in Claim 1, in which in addition to the protective colloids such substances are added to the latex prior to evaporation which impede coagulation, pectisation or flocculation of the latex, and aid in peptisation or dissolvation.

3). Modification of the process as set forth in Claims 1 and 2, in which in the case of caoutchouc latex, prior to evaporation, an alkali, for example ammonia, or

an organic base, e.g. piperidine, are added to the latex for the purpose of neutralising the natural acidity of the caoutchouc latex, and for preventing acid coagulation.

4). Modification of the process as set forth in claims 1 and 2, in which in the case of latex of guttapercha, balata, or other analogous vegetable resins, prior to evaporation, instead of ammonia for preserving the latices, an organic base is used for the purpose of neutralising the natural acidity of the latex, and preventing an acid coagulation, and for preventing the detrimental effect which ammonia or the like alkalis would have on the tannic acid contents of the latex.

5). Modification of the process as set forth in claims 1 to 4, in which the protective colloids or the substances impeding the coagulation, pectisation or flocculation are of such a nature that they serve at the same time as means for increasing the elasticity, as filling materials, colouring or in the case of caoutchouc latex as vulcanisation acceleration or controlling agents, or that they have any other properties for influencing the manufacture or the properties of the final product when worked up.

6). Modification of the process for concentrating latex of caoutchouc, guttapercha, balata, and other analogous vegetable resins, as set forth in the preceding claims, in which with or without the addition of protective colloids, peptising agents and agents impeding coagulation, pectisation or flocculation, the serum of the natural latices is removed by filtration, ultra-filtration or dialysis until the residue takes up the consistency of paste.

7). In the process as set forth in the preceding claims the addition of controlled amounts of water to the dried or paste-like reversible latices of caoutchouc,

(including caoutchouc latex in the vulcanised state), guttapercha, balata, and other analogous vegetable resins, for the purpose of obtaining a paste-or solution of caoutchouc latex, vulcanised caoutchouc latex, guttapercha, balata, or the like, of any desired consistency.

8). The process for producing a paste-like or solid water-soluble product of caoutchouc latex (including latex in the preserved state, or in a state in which the caoutchouc is vulcanised without losing its colloidal properties) or of latex of guttapercha, balata, or other analogous vegetable resins, substantially as described.

9). A paste-like or solid water-soluble product obtained from caoutchouc latex (including latex in the preserved state or in a state in which the caoutchouc is vulcanised without losing its colloidal properties), or of latex of guttapercha, balata, or other analogous vegetable resins, whenever obtained according to the process set forth in the preceding claims.

10). A paste or solution of caoutchouc latex, vulcanised caoutchouc latex, or of latex of guttapercha, balata, or other analogous vegetable resins, of any desired consistency, produced by the addition of controlled amounts of water to the paste-like or solid water-soluble products obtained by the process set forth in claims 1 to 8.

3. The Applicants, therefore, apply for leave to file a Specification of the Invention pursuant to Part 1 of the Inventions and Designs Regulation, 1894.

M. Hinkenburg
Ernest Alfred Hamer,

We, the Applicants above-named, do declare that the facts stated in this Application are true to our knowledge, except as to matters stated on information and belief, and as to those matters we believe them to be true.

Dated this 2nd day of November, 1923.

M. Hinkenburg
Ernest Alfred Hamer

Witnesses:

Albert Wood.
William Thiemann

49
Sl. 13

G. R. S. VI—S.-v/21]

Government of Mysore.

GENERAL DEPARTMENT.

Register No. 7 ..... of 19 23-24

R. 801 Ref:-16-23-13 Bangalore, the 31/7/1924

WHEREAS an application, dated the 30th November 1923 and received on the 6th December 1923, has been submitted under Section 5 of the Mysore Inventions and Designs Regulation, 1894, by Messrs. Merrington Stanley Stubelsburg, London, E.C. 3. and Ernest Alfred Hauser of Marienstrasse, Frankfort-on-the-Main, Germany

(hereinafter referred to as "the applicant") for leave to file a specification of an invention (No. 7/23) for Improvements in and relating to the manufacture of Caoutchouc, Gutta-percha & Balata and Analogous Vegetable Resins

And whereas the applicant has duly complied with all the requirements of Section 5 of the said Regulation;

The Government of Mysore are pleased, under Section 6 of the said Regulation, to authorize the applicant to file a specification of the said invention in accordance with the provisions of the said Regulation.

ORDERED, that the applicant be, and he is hereby, informed accordingly.

By Order of the Government of Mysore,

SMR 23/8/24 for Secretary to the Govt. of Mysore,
Rev. ~~General~~ Department.

Certified that the fees prescribed in the fourth schedule to the Mysore Inventions and Designs Regulation, 1894, in respect of the application for leave to file the said specification and of the filing thereof have been paid by the applicant, and that the specification hereinbefore described has been duly filed in accordance with the provisions of Section 8 of the said Regulation on this the 25-8 day of 25th August 1924

SMR 23/8/24 for Secretary to the Govt. of Mysore,
Rev ~~General~~ Department.

(Section 8 of the Inventions and Designs Regulation, 1894.)

8. (1) If within six months from the date of an order under Section 6, Sub-Section (1), or within such further time, not exceeding three months, as the Government of Mysore, in its discretion, may, on cause shown to its satisfaction and on payment of the fee prescribed in that behalf in the fourth schedule, see fit to allow, the applicant causes a specification of his invention to be filed in manner by this Part required, and the fee prescribed in the fourth schedule in respect of the filing of the specification to be paid, the applicant shall, subject to the other provisions of this Part, be entitled to the exclusive privilege of making, selling and using the invention in the Territories of Mysore, and of authorizing others so to do, for a term of fourteen years from the date of the filing of the specification.

(2) But an exclusive privilege in respect of an invention of a new manufacture shall, notwithstanding anything in Sub-Section (1), cease, if the inventor fails to pay, within the time limited in that behalf by the fourth schedule, any fee prescribed in that schedule in respect of the continuance of the privilege.

(3) If, nevertheless, in any case, by accident, mistake, or inadvertence, an inventor fails to pay any such fee within the time so limited, he may apply to the Government of Mysore for an enlargement of the time for making the payment.

(4) Thereupon the Government of Mysore may enlarge the time accordingly, on payment of the fee prescribed in that behalf in the fourth schedule, and subject to the following conditions, namely :—

(*a*) the time for making a payment shall not in any case be enlarged for more than three months ; and

(*b*) if any suit is instituted in respect of an infringement of the exclusive privilege committed after a failure to make a payment within the time limited for the making thereof and before the enlargement of that time, the Court disposing of the suit may, if it thinks fit, refuse to award or give any damages in respect of the infringement.

W D 02300—GPB—500—24-11-16

51 2

G. R. S. VI—s-v/13]

DRAFT.

SUBJECT.....

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.....

Section. Pat
File No. 16-23.
Serial No. 14

No. P. C. - 2-7

Diary No. of letter replied to.....

GENERAL AND REVENUE SECRETARIAT,
( )
the.....191

Date of issue 21/7/24

Signed by [illegible]

To

Messrs: Petavel & Petavel
Patent Agents
10, Government Place East,
Calcutta.

GENTLEMEN.

With reference to your letter No.....
dated the 30th November 1923
I am directed to forward herewith G. O.
No. P.C. 701 dated the 21/7/24
G.M. 317
Ecc.
191 , authorizing Messrs: Mervyn Stanley Stallebrass of London & Ernest Alfred Mauser of Mainzerstrasse, Germany to file a specification of an invention for "Improvements in or connected with the manufacture of Caoutchouc, Gutta percha, Balata & Analogous Vegetable Resins"
and to request that the fact may be communicated to the party concerned.

I have, etc.

SMR 23/7

Secretary to Government.

Rev. Dept.

16397

2890 152

DWS

GEN. & REV. SECRETARIAT
20 AUG 1924
INDUSTRIES & COMMERCE
BRANCH.

10, Government Place, East,

Calcutta, 16th August 1924.

Pol- 16-23-15

To

The Secretary to the Government of His
Highness The Maharaja of Mysore,
General and Revenue Secretariat,
Bangalore.

20. AUG. 1924

Sir,

re: M. S. Stutchbury & E.A. Hauser - Mysore.

We have the honour to forward enclosed the Specification in the above case and 4 copies thereof in compliance with Government Order No.1-C 801 Pat 16-23-13 dated the 31st July 1924.

We also enclose herewith the "Order" to enable you to fill up the Certificate at the foot thereof and which may please be sent to us in due course.

The fee on the Specification Rs.30/- has been forwarded to you by Money Order by to-day's Post.

We have the honour to be,

Sir,

Your most obedient servants,

De Penning & De Penning

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COUPON. *The remitter may write here any communication to the payee.*

£ 30 Ag. —

Fa on Stutchbury & Hann's Spen:

Remitter.

GEN. & REV. SECRETARIAT.
2 AUG 1924
INDUSTRIES & COMMERCE BRANCH.

Part 16-23

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.)

1. No.....
2. Date of Remittance 23/8/24
3. From whom received Swastika Co-operative Insurance Society Ltd Calcutta
4. Date of receipt of amount in the General and Revenue Secretariat 26/8/24
5. On what account Stamp fee in respect of insurance Act 7/23
6. Amount (in figures and words) Rs 30/- Rupees thirty only
7. The head to which it should be credited.

(To be filled in by the Treasury.)

S. Narayana Rao

for Secretary to Government,
Revenue General Department.

The above amount has been duly received and credited in the Treasury on this date.

Date AUG 3 1924

BANGALORE

Hd. Accnt. *Treasurer.* *Try. Officer.*

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

55 30/4/15

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE

General and Revenue Secretariat

Dated Bangalore, 25th Sept. *1920*

No. /Pat. 16-23-16

I.C 1316

S. Iyengar vs K.V. Ananthan

NOTIFICATION.

[PATENT]

no. 7-23

The following specification of an invention has been filed in accordance with sections 8, 9, 10 and 11 of Regulation XI of 1894 (The Inventions and Designs Regulations) and is open to inspection at the Mysore Government Secretariat on application to the ~~Chief~~ Rev Secretary to the Government of His Highness the Maharaja of Mysore, and on payment of a fee of one rupee,

for "improvements in and relating to the manufacture of Caoutchouc, Guttapercha, Balata and Analogous Vegetable resins" by Rev. Mervyn Stanley Stutchbury of London, and Ernest Alfred Hauser, Germany.

By Order,

SNV 23/8 Rev ~~Chief~~ *Secretary to Government.*

AD

To

The Compiler, Mysore Gazette.

A121

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G. R. S. VII—s-v/18]

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

GENERAL AND REVENUE SECRETARIAT.

Dated Bangalore, 25/8/ 192

No. I. C 1317/Pat Two 16-23-17 Encl. 2

FROM Pat-16-23-17

Secretary to the Government of H. H. the Maharaja of Mysore,

To Messrs. de Penning & de Penning Patent agents. 18 Govt. Place, East Calcutta

Gentlemen ~~Sir,~~

With reference to your letter dated 30th November 1923 I am directed to forward copy of a Notification No. I. C 1316 Pat-16-23-16 dated 25/8/24 issued no. 2-23 by this Government in regard to the invention filed by you under Regulation XI of 1894 (The Inventions and Designs Regulations.)

The order granting permission to file specification is herewith returned with the certificate at foot, duly filled in and signed.

I have the honor to be,
Sir,
Your most obedient servant,

SNV 23/8/24

for *Secretary to Government.*

Rev. Dept.

WD 02297—GPB—250—4-2-18

G. R. S. VI.—s-v/12]

57 3

DRAFT.

SUBJECT.....

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Section. Pat
File No. 16-23
Serial No. 18

Diary No. of letter replied to.....

No. 1C 1318-20/Pat & one Copy Cert.

GENERAL AND REVENUE SECRETARIAT,
( )
the.....191

(1) The Superintendent, Govt. Museum.
(2) The Chief Engineer of Mysore.
(3) ..... Dir. of Ind.

Date of issue 25-8-24.

Signed by [illegible]

Has the honor to forward herewith for record in his office copy of a specification of an invention ~~for~~ dt. 7-23 for "improvements in and relating to the manufacture of Caoutchouc, Gutta-percha, Balata, and analogous Vegetable Juices" by Mr. Arthur Stanley Shuttleworth of London, and Mr. Ernest Alfred Hauser, Germany,

By Order,

[illegible] 23/8

for Secretary to Government.

Rec. Deputy

[illegible]